

S/N 10/085,559

Response to Office Action Dated 11/02/2005

**IN THE CLAIMS**

By way of overview, claims 1—32 are currently pending. Of these pending claims:

- A) Claims 1—5, 7—15, 17—20 and 22—32 remain in original form.
- 5 B) Claims 6, 16 and 21 claims are currently amended.

1. (Original) A processor-readable medium comprising processor-executable instructions for:

comparing a rate of pattern repetition in data to recorded rates of pattern

10 repetition;

determining a content type using the rate of pattern repetition and the recorded rates of pattern repetition; and

compressing and decompressing data in a manner appropriate to the content type.

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2. (Original) A processor-readable medium as recited in claim 1, additionally comprising instructions for:

determining data patterns that are frequently found in a first content type and which are infrequently found in a second content type.

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3. (Original) A processor-readable medium as recited in claim 1, additionally comprising instructions for:

examining data of a known content type;

recording rates of pattern repetition found in the data of the known content

25 type.

S/N 10/085,559

Response to Office Action Dated 11/02/2005

4. (Original) A processor-readable medium as recited in claim 1, additionally comprising instructions for:

after the rate of pattern repetition changes, compressing and decompressing  
5 data according to a new content type.

5. (Original) A processor-readable medium as recited in claim 1, additionally comprising instructions for:

building a pattern library by recording rates of pattern repetition from data  
10 of a known content type.

6. (Currently Amended) A system for data content recognition, compression, and decompression, comprising:

a data recognition module to recognize a content type of data, wherein the  
15 data recognition module compares a rate of pattern repetition in data to recorded  
rates of pattern repetition and determines a content type using the rate of pattern  
repetition and the recorded rates of pattern repetition;

a compressor to compress the data according to the content type; and

a decompressor to decompress the data according to the content type.

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7. (Original) The system of claim 6, wherein the data comprises device ready bits appropriate to drive a print engine.

S/N 10/085,559

Response to Office Action Dated 11/02/2005

8. (Original) The system of claim 7, additionally comprising:  
a buffer, within which the device ready bits reside after compression and  
before decompression.

5 9. (Original) The system of claim 6, wherein the compressor is on a  
workstation and the decompressor is on a printer.

10 10. (Original) The system of claim 6, wherein the compressor and the  
decompressor are on a printer.

11. (Original) The system of claim 6, additionally comprising:  
a PDL interpreter to supply the data to the data recognition module.

15 12. (Original) The system of claim 6, additionally comprising:  
a print engine to receive the data after decompression.

20 13. (Original) The system of claim 6, additionally comprising:  
a learning module, in communication with the data recognition module, to  
learn relationships between a plurality of data patterns associated with a plurality  
of content types.

14. (Original) The system of claim 6, additionally comprising:  
a pattern library, in communication with the data recognition module, to  
store information on relationships between data patterns and content types.

S/N 10/085,559

Response to Office Action Dated 11/02/2005

15. (Original) The system of claim 6, additionally comprising:

a recognition module, in communication with the data recognition module, to associate data patterns and content types.

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16. (Currently Amended) A printer, comprising:

a data recognition module to recognize a content type of device ready bits, wherein the data recognition module compares a rate of pattern repetition in the device ready bits to recorded rates of pattern repetition and determines a content  
10 type using the rate of pattern repetition and the recorded rates of pattern repetition;

a compressor to compress the device ready bits according to the content type of the device ready bits;

a buffer to store the device ready bits after compression and before decompression;

15 a decompressor to decompress the device ready bits according to compression of the device ready bits; and

a print engine to receive the device ready bits after decompression.

17. (Original) The printer of claim 16, additionally comprising:

20 a PDL interpreter to interpret a PDL print job and to supply the device ready bits.

S/N 10/085,559

Response to Office Action Dated 11/02/2005

18. (Original) The printer of claim 16, wherein the data recognition module additionally comprises:

a learning module to learn relationships between a plurality of data patterns and a plurality of content types.

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19. (Original) The printer of claim 18, wherein the data recognition module additionally comprises:

a pattern library to store information on the relationships.

10 20. (Original) The printer of claim 16, wherein the data recognition module additionally comprises:

a recognition module to associate data patterns and content types.

15 21. (Currently Amended) A method for data content recognition, compression, and decompression, wherein the method is implemented at least in part by a computing device, the method comprising:

examining data for pattern repetition;

comparing a rate of pattern repetition to recorded rates of pattern repetition;

determining a content type of the data; and

20 compressing the data in a manner appropriate to the content type of the data.

S/N 10/085,559

Response to Office Action Dated 11/02/2005

22. (Original) The method of claim 21, additionally comprising:  
decompressing the data in a manner appropriate to the content type of the  
data.

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23. (Original) The method of claim 21, wherein the data comprises  
device ready bits.

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24. (Original) The method of claim 21, additionally comprising:  
examining data of known content type; and  
recording rates of data pattern repetition.

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25. (Original) The method of claim 21, additionally comprising:  
building a pattern library by recording rates of pattern repetition from  
device ready bits from data of known content type.

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26. (Original) The method of claim 21, additionally comprising:  
after the rate of pattern repetition changes, compressing and decompressing  
device ready bits according to a new content type.

S/N 10/085,559

Response to Office Action Dated 11/02/2005

27. (Original) A processor-readable medium comprising processor-executable instructions for:

examining data for pattern repetition;

comparing a rate of pattern repetition to recorded rates of pattern repetition;

5 determining a content type of the data; and

compressing the data in a manner appropriate to the content type of the data.

28. (Original) A processor-readable medium as recited in claim 27,  
10 additionally comprising instructions for:

decompressing the data in a manner appropriate to the content type of the data.

29. (Original) The processor-readable medium of claim 27, wherein the  
15 data comprises device ready bits.

30. (Original) A processor-readable medium as recited in claim 27,  
additionally comprising instructions for:

examining data of known content type; and

20 recording rates of data pattern repetition.

S/N 10/085,559

Response to Office Action Dated 11/02/2005

31. (Original) A processor-readable medium as recited in claim 27,  
additionally comprising instructions for:

building a pattern library by recording rates of pattern repetition from  
5 device ready bits from data of known content type.

32. (Original) A processor-readable medium as recited in claim 27,  
additionally comprising instructions for:

after the rate of pattern repetition changes, compressing and decompressing  
10 device ready bits according to a new content type.